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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/529,919    04/21/00    FURUYA

A    032590-055

EXAMINER

TM02/0725

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POSITOS, A  
ART UNIT

PAPER NUMBER

2651  
DATE MAILED:

07/25/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/529,919

Applicant(s)

FURUYA ET AL.

Examiner

Aristotelis M Psitos

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

***Priority***

1. Applicants' claim for priority on PCT JP99,04674 is acknowledged. Copies of the priority papers have been received and placed in the file.

It is noted that no separate listing of the references noted in the accompanying PCT equivalent application has been provided. Although copies of the references noted therein have been provided, because there is no separate listing, <sup>all</sup> ~~they~~ have not been reviewed.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 15 and 18 are rejected under 35 USC 112 paragraph one as lacking enablement.

Applicants' attention is drawn to MPEP 2181 with respect to *In re Hyatt, 708 F.2 d 712.*

As best as the examiner can interpret these two claims, they are drawn to a system (apparatus) comprising of a single means – a laser source.

Claims 15 and 16 are rejected under 35 USC 112 paragraph one as lacking enablement.

Applicants' attention is drawn to MPEP 2181 with respect to *In re Hyatt, 708 F.2 d 712.*

As best as the examiner can interpret these two claims, they are drawn to a system (apparatus) comprising of a single means – a recording medium.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner is not certain as to what "loads" refers to in this claim. What further limitation (structure) of a record medium is applicant attempting to define?

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Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner is confused as to what the claim is attempting to define. Perhaps it is because it attempts to incorporate more than 1 previously recited claim. The examiner strongly recommends complying with standard USPTO practice in claim drafting to avoid unnecessary rejections.

/ 4. Claims 13 and 14 are rejected under 35 USC paragraph 4 for failing to further limit a parent claim.

The parent independent claim of both of these claims is a product. Unfortunately, these dependent claims recite manufacturing limitations, and hence fail to comply with the above statutory requirement.

The examiner strongly recommends redrafting these claims in proper USPTO format. It must also be pointed out to applicants that if these dependent claims are properly rewritten, they would be subject to a restriction requirement since they are drawn to a manufacturing technique and not to a mo rec/rep system having a particular recording material.

AS FAR AS THE CLAIMS RECITE POSITIVE LIMITATIONS THE FOLLOWING ART REJECTIONS ARE MADE.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 2, 4-9,11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimokawa et al further considered with Nakamura et al.

The reference to Shimokawa et al discloses an MO record, having a substrate and a multi recording layer as well as a reflective layer, these last two layers upon the substrate.

Although the recording layer of Shimokawa et al can indeed be multi-layered the types of layers are not specified as claimed.

The ability of having a spinel ferrite recording layer as part of a mo recording medium is acknowledged by the reference to Nakamura et al – see his table two for instance.

It would have been obvious to one of ordinary skill in the art to modify the system of Shimokawa et al with the teaching from Nakamura et al, motivation is to provide for an appropriate under-reflecting layer of the material specified in claim 1 to provide for appropriate signal reflection from the reflective under layer.

The limitations of claims 4 & 5 are depicted in these references and no further analysis is made thereto.

✓ With respect to the thickness values – applicant's attention is drawn to col. 2 line 45 to column 3 line 15 of Shimokawa et al.

With respect to claims 9 & 11, Nakamura et al provides for the grooved substrate as well as a protective layer.

7. Claims 3 & 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 above, and further in view of JP 5-303776.

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The particular limitation of claims 3 and 12 are considered obvious over the above base references considered with JP 5-303776.

Placing grooves on the top of a mo record medium is taught in the JP document, and from such a teaching, provision of such grooves on the top reflecting film of Shimokwawa et al would lead to the limitation of claim 3, that is only the garnet recording layer is found between the tracks - in the groove section.

The use of grooves for tracking purposes is well known and whether one put the such grooves (relocated) on the top surface as opposed to the bottom surface is considered merely a relocation of elements without leading to any unexpected results and an obvious variant.

4. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 above, and further in view of Terao et al.

The ability of having heat treatment for the manufacturing of mo record media is acknowledged by the Terao et al reference. Such treatment is considered part of the manufacturing steps required.

As to the specific values recited in these claims, although no such value(s) is found in Terao et al, such limitations are considered to be merely optimization of system parameters and obvious to those of ordinary skill in the art. The temperature range/value for the heat treatment would be evaluated in order to yield an optimum manufacturing results. No unexpected results are seen to occur from such optimization.

It would have been obvious to one of ordinary skill in the art to modify the system of the prior art as applied with respect to claim 1 with the teaching from Terao et al, motivation is to optimize the manufacturing heat treatment process.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by JP 6-89480.

The limitation recited in this claims is considered self evident and anticipated by the JP document – see the abstract.

7. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 6-89480 as applied to claim 15 above, and further in view of the prior art relied upon as stated with respect to claim 1.

The recording record of the JP document is not particularly specified. The acknowledged references as relied upon with respect to claim 1 disclose/teach the record medium.

It would have been obvious to one of ordinary skill in the art to modify the system of JP 6-89480 with the teaching from Shimokawa et al-Nakamura et al, motivation is to save valuable resources by using existing recording/reproducing systems – i.e., the short and long wavelength ability.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 6-89480 as applied to claim 15 above, and further in view of Official notice.

The ability of having a single light source provide for a plurality of light beams for the specific mode of operation is considered to be notoriously old and well known and Official notice is taken thereof.

It would have been obvious to one of ordinary skill in the art to modify the system of JP6-89480 with the teaching from Official notice, motivation is to reduce the number of light source in the JP document and hence reduce the cost/complexity thereof.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703)308-1598. The examiner can normally be reached on M-Thursday 8 - 4.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (703) 308-4825. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

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Aristotelis M Psitos  
Primary Examiner  
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July 24, 2001